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Docket No. SUN-DA-106T  
Serial No. 10/676,643Remarks

Claims 2, 3, and 5-10 are pending in the subject application. By this Amendment, claims 2, 3, 5, and 6 have been amended. In particular, claim 2 has been amended to include "wherein the slurry flowing in the by-pass is returned to the slurry supply line;" claim 5 has been amended to include "returning the slurry in the by-pass to the slurry supply line;" and claims 3 and 6 have been amended to replace "ingredient" with "ingredients." No new matter has been introduced by these amendments. Upon entry of these amendments, claims 2, 3, and 5-10 will be before the Examiner. Favorable consideration of the pending claims is respectfully requested.

The specification has been objected to for replacing the term "composition" with "ingredient." The specification has been amended to replace "ingredient" with "ingredients" according to the Examiner's suggestion. In reference to the definition of "composition" as disclosed in the original specification, the term should not be defined as disclosing that the diluent solution is either water or a solution having the same ingredients *in the same proportions* as the slurry solution. Rather, the applicant submits that in addition to the context of the term "composition" in the description of the original application, the Korean application No. 10-2002-0086887, from which benefit is claimed, uses the term "성분," which may also be translated as "ingredients." Therefore, the diluent solution does not necessarily have the same ingredients in the same proportions as the slurry solution. Requiring the same proportions as the slurry solution would be unnecessarily limiting.

The rejections of Claims 3 and 6 under 35 U.S.C. § 112, first paragraph, and 35 U.S.C. § 112, second paragraph, have been obviated by the above amendment. As discussed above, the term "ingredients" is supported in the original description.

Claims 7-10 have been rejected under 35 U.S.C. § 112, second paragraph. Applicant respectfully traverses. Applicant asserts that "a density of the slurry supplied to the slurry injection nozzle is calculated to be higher than a density of the supplied diluent solution," "an amount of the particles of the slurry supplied to the slurry injection nozzle is calculated to be higher than an amount of particles of the supplied diluent solution," "a density of the slurry in the slurry supply line is calculated to be higher in inverse proportion to the amount of supplied slurry," and "an amount of the particles in the slurry supply line is calculated to be higher in inverse proportion to the amount of supplied slurry" are definite. In particular, as described at paragraph [0021] of the specification, the

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amount of particles and density is adjusted and calculated considering the amount of supplied diluent solution. An amount of supplied slurry has a density ( $\rho$ ) and a number of particles associated with it. In effect, as shown in the relation below, it is the volume of supplied slurry that is inversely proportional to the density of the slurry, and consequently the number of particles of the slurry, in the slurry supply line.

$$\rho_{slurry} = \frac{\rho_{measured}(V_{slurry} + V_{diluent})}{V_{slurry}}; \text{ where } \rho = \frac{\# \text{ particles}}{V}$$

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the §112, second paragraph, rejection of claims 7-10.

Claims 2, 3, and 5-8 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kondo *et al.* (U.S. Pat. App. No. 2002/0061722) in view of Grant *et al.* (U.S. Pat. App. No. 2003/0174306). Applicant respectfully traverses. As discussed above, claims 2 and 5 have been amended to include "wherein the slurry flowing in the by-pass is returned to the slurry supply line" and "returning the slurry in the by-pass to the slurry supply line," respectively.

The Office Action admits, at page 6, that Kondo fails to disclose a diluent solution supply unit to supply diluent solution into the by-pass to reduce a concentration of particles in the slurry. Therefore, Kondo *et al.* does not suggest returning diluted slurry to the slurry supply line.

Regarding Grant *et al.*, although Grant *et al.* suggests a means to further dilute the slurry solution prior to passing through the sensors to ensure that the sensors can obtain accurate readings, Grant *et al.* teaches that discharge from the by-pass is collected in one or more drains (*see* Grant *et al.* paragraphs [0059] and [0065]).

Therefore, Kondo *et al.* and Grant *et al.*, alone or in combination, fail to teach or suggest supplying diluent solution into a bypass for reducing a concentration of particles in the slurry and then returning the slurry passing through the by-pass to the slurry supply line. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the §103(a) rejection of claims 2, 3, and 5-8.

In view of the foregoing remarks and amendments to the claims, Applicant believes that the currently pending claims are in condition for allowance, and such action is respectfully requested.

The Commissioner is hereby authorized to charge any fees under 37 C.F.R. §§ 1.16 or 1.17 as required by this paper to Deposit Account 19-0065.

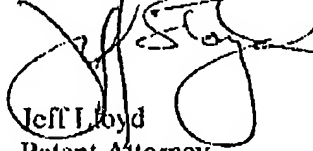
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Applicant invites the Examiner to call the undersigned if clarification is needed on any of this response, or if the Examiner believes a telephonic interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,



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